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RESEARCH PAPER

The quality of life of flood survivors in Thailand, Nakhon Pathom Rajabhat University

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KEYWORDS

Quality of life;
Flood survivors;
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Summary

Background: The flood crisis of 2011 was a disaster of the highest order in Thailand and Nakhon Pathom Province was among those hit. The purpose of this research was to explore quality of life of flood survivors in Thailand living in a flood shelter established by Nakhon Pathom Rajabhat University.

Methods: This study was a descriptive research. The research instrument was WHO quality of life-brief Thai questionnaire (WHOQOL-BREF-THAI). The data were collected by self administered questionnaires, or read to the subjects who cannot read, then evaluated the answers by themselves on November, 2011. Descriptive statistics, independent-sample *t*-test and one-way ANOVA were used in the data analysis.

Results: The study found that: (1) The quality of life score was found to be at a moderate level of 65.9% and a high of 34.1%. The social relationships domain of quality of life was at the highest level (47.6%). The poorest quality of life score was from the environmental domain (24.9%); (2) There was no significant difference between gender ($t = 0.004$, p -value = 0.997) or age ($F = 1.356$, p -value = 0.260), with quality of life.

Conclusion: The quality of life evaluation of flood survivors should be further monitored after the recovery and an intervention programme should address their respective needs and covers all aged and genders.

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What is known

- The quality of life of the flood survivors was not good enough especially environmental domain.
- Knowing about factor related to quality of life lead to successful management of Flood Victims at the Shelter.

What this paper adds?

- Quality of life level should be further monitored after returning to normal life.
- Relationships with other people, and perceived their provided assistance from other people improve quality of life.
- Management of environment in flood victims at the shelter more likely to improve quality of life.

Introduction

Thailand was faced with severe flood during the 2011. The crisis situation began in the end of July, flood soon spread through the Northern, the Western and the Central of Thailand, a large number of people in several provinces got into difficulties. Nakhon Pathom Province is located in the Western region, the flooding situation in the province occurred when roads, residential and commercial properties had been damaged by overflow from Taweewattana canal, Mahasawat canal, and Yong canal since 2nd September 2011 totally flooding 7 districts, 99 sub-districts, 854 villages, 164,396 people, 45,651 households, and 6 deaths.¹ The flood survivors needed to evacuate their home and took refuge in several shelters. Nakhon Pathom Rajabhat University realised such difficulties, so the university established the shelter for flood survivors with collaborating with the provincial public health office and the local government since October until 7th November, 2011.²

The Nakhon Pathom Rajabhat University shelter, provided an area in the hall of the Student Affairs building, serving 645 people, provided accommodations, food, clothing, medicine, health services centre, and health consultation, as well as generous services by nursing instructors and students. The University allowed the flood survivors to participate in taking care of members in each zone as a village that consisting of 4–5 families, assigned team members to work shifts for taking charge in cooking, cleaning residential areas and toilets, security, and coordinating with the University officers and outsiders. During the flooding crisis, Thai people showed their hospitality in terms of donation of money, and necessities for daily supplies.

The survivors living together in the shelter among a variety of people with different families and backgrounds would affect their overall quality of life. There is no research about quality of life of flood survivors in Thailand. Therefore, the researcher was interested in studying the quality of life among flood survivors that would be beneficial for efficient shelter management. The findings of the study would be helpful for instructors, faculties, universities, and related agencies for the purpose of improving or monitoring flood

survivors' health and quality of life after returning to normal life. This would fulfil the mission of the University that regarding the community development and empowerment.

Aims of the study

The aim of this research was to explore quality of life of flood survivors in Thailand living in a flood shelter established by Nakhon Pathom Rajabhat University.

Materials and methods

Study design

A descriptive exploratory method was used to conduct the study.

Regarding the research subject advocacy, the researcher explained and gave information about the to all randomly selected subjects before collecting the study data, and allowed the subjects to ask for information in detail. The individual confidential data were presented in the overview without mentioning name of the informants so as not to cause damage. The subjects had the right to deny answering questions at any time without giving reasons that would not affect their welfare.

Population

The population was 341 flood survivors who aged over 18 years at the Nakhon Pathom Rajabhat University shelter from October to November 2011² chosen by a simple random sampling method. The subjects were assigned individual identification and selected each one number at a time until the researcher got 200 subjects. The sample size was calculated by the calculating method of Taro Yamane.³

Instrument

The research instrument was the questionnaire on demographic data including gender and age, and the WHO quality of life-brief Thai questionnaire (WHOQOL-BREF-THAI). The questionnaire was modified by Mahatnirunkul and another in 1997 in the Thai context. The questionnaire has reviewed and revised for the English language in the WHOQOL-BREF by experts in English and Thai language and to test their understanding with a fundamental difference of Thai people to adjust the item that had a problem and retest for the third round. The reliability of the instrument with the reliability Cronbach's alpha coefficient was 0.841, and content validity score of 0.652.⁴

The quality of life questionnaire contained 26 items for measuring both perceived objective and self-report subjective with 5-level rating scale, comprising 23 positive items and 3 negative items for measuring 4 domains of quality of life including physical domain, psychological domain, social relationships domain, and environmental domain. Score of quality of life ranged from 26 to 130 points. After calculating score of all items, the researcher compared the scores with the standard criteria as follows: 26–60 points indicated poor

quality of life, 61–95 points indicated moderate quality of life, and 96–130 points indicated good quality of life.

Data collection

The data were collected by self administered questionnaires from 7 to 9 November 2011. In the elderly or persons who cannot read, the surveys were read out by the researcher, the subjects listed and gave their answers to the researcher or assistants. The researcher or the assistants also provided further explanation regarding World Health Organization definitions related to specific questions. The data analysis was made by descriptive statistics, independent sample *t*-test, and one-way ANOVA.

Results

Response rate

The questionnaire submitted to 200 survivors and 193 questionnaires were returned by nursing students which protected the confidentiality and human rights of the survivors. The response rate was 96.5% but there were 8 questionnaires were not completed and excluded. Finally, the sample size was 185 subjects.

Demographic data

Most subjects were female (63.2%). Their average age was 41.6 years (*SD*=4.5). Most of them aged between 22–59 years (76.7%), followed by those aged over 60 years (13.5%), and aged 18–22 years (9.7%).

Quality of life

According to the study of the overall quality of life among 185 subjects, their overall quality of life was at a moderate level (mean=90.84, *SD*=10.78). The majority of them had the moderate quality of life (65.9%), followed by the good quality of life (34.1%). When considering each domain, the good quality of life belonged to the following domains respectively: Social domain (47.6%), psychological domain (41.6%), physical domain (25.4%), and environmental domain (24.9%).

The comparison of the quality of life among flood survivors by gender and age

The findings revealed that female and male did not have different quality of life ($t=0.004$, p -value=0.997), and the subjects aged between 18–21 years, 22–59 years, and over 60 years did not have different quality of life ($F=1.356$, p -value=0.260).

Discussion

The response rate was quite high because we were generally recognised by the flood survivors and the survivors come back to the shelter in the evening giving available time to

return the questionnaire. The high response rate may be also come from the trust with the nursing students and the instructor whom takes care of the survivors.

Most subjects were female (63.2%) in the adulthood at the age of 22–59 years (76.8%). This data were consistent with the structure of national populations.⁵ However, the findings of this study might not be able to refer to other populations that possessed different context from the populations in this study.

Quality of life

Based on the study, most subjects (65.9%) had the moderate level of quality of life, followed by the good quality of life (34.1%). The findings indicated that although the subjects had to evacuate their home and take refuge at the Nakhon Pathom Rajabhat University shelter, they did not perceive their poor quality of life because the shelter management could fulfil their fundamental requirements, as well as the periodical visits by celebrities, actors, singers who gave encouragement to the flood survivors together with close care from the University instructors and students. Moreover, their assistance provided from friends (Thai compatriots), the university was located in non-flooded Muang district, which the traffic was convenient, and most flood survivors in the adulthood would leave the shelter during the day-time for surveying the flooding situations around their home and workplace. Thus, these factors altogether enhanced the moderate-good quality of life of the subjects.

Regarding the comparison of quality of life between the flood survivors and other subjects using the same questionnaire, the quality of life of the flood survivors was reportedly at a good level (34.1%). This figure was higher than the quality of life of Thai people during the economic crisis in 1998 that found only 20.5% of subjects had good quality of life.⁶ The quality of life in our study was also higher than the quality of life of physicians in three southern border provinces in 2005 during the unrest in the country's southern border: in this study only 30.2% of subjects reported good quality of life.⁷

According to the comparison of quality of life among the flood survivors in terms of gender and age, overall quality of life between male and female was not different. The study of relationships between the overall quality of life and age, showed that those aged between 18–21 years, 22–59 years, and over 60 years did not have a different overall quality of life. The findings reveal that different gender and age did not cause different overall quality of life which might be because the flood survivors accessed the services at the shelter. In addition, this study was conducted at a specific period when the flood survivors had lived in the shelter with good services system, direct and sincere help without conditions. Therefore, their gender role such as leadership or protector in a Thai traditional way had not been visible, so the overall quality of life was not different. The findings of this study were different from the study of Mahatnirunkul⁶ revealing that factors affecting a good level of quality of life during the economic crisis were male and maturity. Differently, the study of the World Health Organization⁸ reported that the female had more emotional disorders and psychological pressure than male during the disaster. The report of

the United Nations⁹ found that the women are often more vulnerable than men as their care-giving roles expand, but their access to adequate resources is constrained during post-disaster situations. And the literature reviewed about the disaster survivors speak during 1981–2001 revealed that the meeting of the mental health needs of children, women, and survivors in developing countries are particularly critical after a disaster is associated with extreme and widespread damaged.¹⁰

The different findings might come from the different context. Changed in the way of life in this study was originated by the immediate flooding. Most flood survivors could not move their important properties in time, so they suffered from unexpected damages of the properties, households, and commercial areas of these survivors from all genders and all age groups had been similarly. Moreover, as the Thai context, where gender does not discriminate between men and women, therefore, after evacuate to living in the shelter the quality of life of the survivors may be influenced as the same.

Environmental domain however showed only 24.9% of the good level. It was shown that there is a poor quality of life in environmental and this was because the limited in the real situation information about flooded, the hall resident area that crowded and did not convenient as their home and also financial status. The other domains of quality of life were organised by the University with responded to the social, the psychological and the physical domain of the quality of life of the flood survivors.

Conclusion

The overall quality of life of the flood survivors in Thailand was at a moderate level. The findings of this study indicated that 100% of people in social relationships domain on the quality of life were either good or moderate. 98.9% of people shown either good or moderate in the quality of life related to psychological domain. Maybe this was because the survivors were freedom to travelled and perceived the social supported with direct and sincere without conditions to fulfil their fundamental requirements with 24h holistic nursing care that covers all aged and genders.

The limitation of this study was that this was the cross-sectional study that assessed the quality of life of the flood survivors while living in the shelter, so the quality of life were limited to only living period in the shelter. Although, the WHOQOL-BREF-THAI questionnaire was the content validity score of 0.652, but it showed the mental subjective that is obsessed with its social and cultural environment.

This study was just an initial report for acquiring basic information about the quality of life among the flood survivors. As the flooding should affect their living afterward in the long term, so quality of life level should be further monitored after returning to normal life and next studies should

follow up the quality of life among flood survivors in several shelters.

The intervention in flood crisis situations of practitioners needs to focus on whole aspects of quality of life of the survivors including social, psychological, physical and environment especially physics and the environment such as the symptom related to stress and uncomfortable on daily life activities, with all of age and gender.

The policy maker can use the preliminary finding for supporting and coordinating with a university shelter administered according to all aspects of quality of life especially physically and the environmental such as advanced health services, information services, affordable financial status, vocational training, and paid temporary jobs.

Provenance and conflict of interest

None declared. This paper was not commissioned.

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